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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,527	09/26/2003	Osman Ahmed	2003P14889US	1203

7590 12/28/2004

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
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EXAMINER	
JARRETT, RYAN A	
ART UNIT	**PAPER NUMBER**
2125	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	10/672,527	AHMED, OSMAN	
	Examiner	Art Unit	
	Ryan A. Jarrett	2125	

-- The MAILING DATE of this communicati n appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-12 and 21-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-12 and 21-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/5/04 have been fully considered but they are not persuasive. Applicant argues that the processor 60 associated with the sensor 52 of Fig. 4 does not generate the control output for controlling the actuator. Granted, the node 70 is capable of generating this control output as well, but the integrated processor associated with the sensor is also capable of generating this control signal. On page 6, lines 21-24, Graviton discloses that the actuator commands may be received via...another sensor assembly.

Applicant argues that Graviton does not disclose the use of a battery. The original Office Action cited page 15 lines 1-32 of Graviton, which teach the use of a battery.

Upon further review, Graviton does in fact disclose an EEPROM (Flash memory on page 5).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 5-7, 11, 12, 21, 22, and 26-36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by WO 00/54237 to Graviton, Inc. ("Graviton"), supplied by the applicant. Graviton discloses:

1. An apparatus for use in a building automation system comprising: at least one microlectromechanical (MEMs) sensor device operable to generate a process value (e.g., pg. 4 lines 15-24, pg. 15 lines 14-16, pg. 17 lines 14-19); a processing circuit operable to convert the process value to an output digital signal configured to be communicated to another element of the building automation system (e.g., pg. 6 lines 19-29); and wherein the at least one MEMs sensor device and the processing circuit are integrated onto a first substrate (e.g., pg. 15 line 31 – pg. 16 line 3); and wherein the processing circuit is further operable to generate a first control output based on at least one set point (e.g., pg. 10 lines 21-28) and the process value obtained from the at least one MEMs sensor device, and wherein the output digital signal is representative of the first control output (e.g., pg. 6 lines 19-29).

2. The apparatus of claim 1 wherein the processing circuit includes a microelectronics A/D converter, the microelectronics A/D converter operable to receive the process value from the at least one MEMs sensor device and generate a digital sensor signal therefrom (e.g., pg. 4 lines 15-24, pg. 15 lines 21-30).

5. The apparatus of claim 1 wherein the at least one MEMs sensor device includes a plurality of MEMs sensor devices (e.g., pg. 15 lines 14-16).

6. The apparatus of claim 1 further comprising a battery secured to the first substrate (e.g., pg. 15 lines 14-21).

7. The apparatus of claim 1 wherein the first substrate is a semiconductor substrate (e.g., pg. 15 line 31 – pg. 16 line 3).

11. The apparatus of claim 1 further comprising an RF communication circuit operably coupled to the processing circuit (e.g., pg. 15 line 31 – pg. 16 line 3).

12. The apparatus of claim 1 further comprising an EEPROM operably coupled to the processing circuit (e.g., pg. 4 line 31 – pg. 5 line 2).

21. An apparatus for use in a building automation system, the apparatus comprising: at least one microelectromechanical (MEMs) sensor device operable to generate a process value (e.g., pg. 4 lines 15-24, pg. 15 lines 14-16, pg. 17 lines 14-19); a processing circuit operably connected to the at least one MEMs sensor device to receive the process value therefrom, the processing circuit operable to convert the process value to an output digital signal configured to be communicated to another element of the building automation system (e.g., pg. 6 lines 19-29); a battery operably connected to provide power to at least the processing circuit (e.g., pg. 15 lines 14-21); and wherein the at least one MEMs sensor device and the processing circuit are integrated onto a first substrate (e.g., pg. 15 line 31 – pg. 16 line 3), and wherein the battery is secured to the first substrate (e.g., pg. 15 lines 14-21).

22. The apparatus of claim 21 wherein the fist substrate is a semiconductor substrate (e.g., pg. 15 line 31 – pg. 16 line 3).

26. An apparatus for use in a building automation system, the apparatus comprising: at least one microelectromechanical (MEMs) sensor device operable to generate a process value (e.g., pg. 4 lines 15-24, pg. 15 lines 14-16, pg. 17 lines 14-19); a processing circuit operably connected to the at least one MEMS sensor device to receive the process value therefrom, the processing circuit operable to convert the process value to an output digital signal configured to be communicated to another element of the building automation system (e.g., pg. 6 lines 19-29); a programmable non-volatile memory operably coupled to the processing circuit (e.g., pg. 4 line 31 – pg. 5 line 2); and wherein the at least one MEMS sensor device and the processing circuit are integrated onto a first substrate (e.g., pg. 15 line 31 – pg. 16 line 3).

27. The apparatus of claim 26, wherein the programmable non-volatile memory comprises an EEPROM (e.g., pg. 4 line 31 – pg. 5 line 2).

28. The apparatus of claim 26, wherein the programmable non-volatile memory is further operable to store configuration information relating to the apparatus (e.g., pg. 16 lines 24-29).

29. The apparatus of claim 28, wherein the configuration information includes identification information for the apparatus (e.g., pg. 24 lines 9-13).

30. The apparatus of claim 29, wherein the configuration information includes a network address corresponding to the apparatus (e.g., pg. 24 lines 9-13).

31. The apparatus of claim 28, wherein the configuration information includes function-enabling information (e.g., pg. 16 lines 24-29).

32. The apparatus of claim 28, wherein the configuration information includes system RF communication parameters (e.g., pg. 13 line 24 – pg. 14 line 4, pg. 16 lines 24-29).

33. The apparatus of claim 27, wherein the EEPROM is further operable to store configuration information relating to the apparatus (e.g., pg. 16 lines 24-29).

34. The apparatus of claim 33, wherein the configuration information includes identification information for the apparatus (e.g., pg. 24 lines 9-13).

35. The apparatus of claim 33, wherein the configuration information includes function-enabling information (e.g., pg. 16 lines 24-29).

36. The apparatus of claim 27, wherein the EEPROM is integrated on to the first substrate (e.g., pg. 4 line 31 – pg. 5 line 2, pg. 15 line 31 – pg. 5 line 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 8-10 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graviton as applied to claims 6 and 22 above. Graviton does not explicitly disclose that the battery is a lithium ion battery coupled to a power management circuit. However, such devices are well known in the art and have

well known advantages. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention to modify Graviton to include the above features due to their well-established advantages.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan A. Jarrett
Examiner
Art Unit 2125

12/11/04

LEO PICARD
SUPERVISORY PATENT EXAMINER
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